```
Items
             Description
             SHIGA (1W) TOXIN
     20537
             S1 AND 2E (1W) SHIGA (1W) TOXIN
            S1 AND STX2E
       229
            S3 AND STX2EB
         3
            RD (unique items)
             S1 AND STX2
      2034
             S6 AND S3
       132
             S7 AND HIS
             RD (unique items)
s9/3,ab/1-4
No matching display code(s) found in file(s): 65, 128, 135, 180, 342,
345, 398, 429
            (Item 1 from file: 349)
^{\prime}3,AB/1
ALOG(R)File 349:PCT FULLTEXT
2004 WIPO/Univentio. All rts. reserv.
763190
COMBINANT FUSION PROTEIN, (VACCINE) COMPOSITION CONTAINING THE SAME AND
METHOD FOR THE PRODUCTION THEREOF
OTEINE DE FUSION RECOMBINEE, COMPOSITION (DE VACCIN) CONTENANT CETTE
DERNIERE ET PROCEDE DE PRODUCTION DE LADITE PROTEINE
COMBINANTES FUSIONSPROTEIN, DIESES ENTHALTENDE (IMPF-)STOFFZUSAMMENSETZUN
G UND VERFAHREN ZU DESSEN HERSTELLUNG
cent Applicant/Assignee:
LOHMANN ANIMAL HEALTH GMBH & CO KG, Heinz-Lohmann-Str. 4, D-27472
Cuxhaven, DE, DE (Residence), DE (Nationality), (For all designated
 states except: US)
tent Applicant/Inventor:
BALJER Georg, Ludwig-Rinn-Strasse 15, D-35452 Heuchelheim, DE, DE
 (Residence), DE (Nationality), (Designated only for: US )
FRANKE Sylvia, Elly-Heuss-Knapp-Weg 18, D-35396 Giessen, DE, DE (Residence), DE (Nationality), (Designated only for: US)
gal Representative:
SIEMONS Norbert, Neuer Wall 41, D-20354 Hamburg, DE
tent and Priority Information (Country, Number, Date):
                      WO 200075345 A1 20001214 (WO 0075345)
Patent:
                      WO 2000EP5127 20000605 (PCT/WO EP0005127)
Application:
Priority Application: EP 99110759 19990604
signated States: AU BY CN HU PL RU UA US
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
olication Language: German
ling Language: German
lltext Word Count: 6025
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HPP. W.

glish Abstract

The invention relates to a recombinant fusion protein, containing a subgenic %Stx2e% fragment of the %Shiga% %toxin% 2e (%Stx2e%) in fusion with a terminal tag, whose size corresponds approximately to that of the fragment or to a fraction of said fragment.

## ench Abstract

L'invention concerne une proteine de fusion recombinee, comportant un fragment %Stx2e% subgenique de la toxine Shiga (%Stx2e%) en fusion avec une etiquette terminale dont la taille correspond approximativement a celle du fragment ou d'une fraction de fragment.

## rman Abstract

Rekombinantes Fusionsprotein mit einem subgenischen %Stx2e%-Fragment des Shiga Toxins 2e (%Stx2e%) in Fusion mit einem terminalen Tag, dessen Grosse etwa der Grosse des Fragmentes oder eines Bruchteils des Fragmentes entspricht.

/3,AB/2 (Item 2 from file: 349) ALOG(R)File 349:PCT FULLTEXT ) 2004 WIPO/Univentio. All rts. reserv. ASMID MAINTENANCE SYSTEM FOR ANTIGEN DELIVERY STABILISATION DE PLASMIDES PERMETTANT D'ADMINISTRER DES DE STEME ANTIGENES atent Applicant/Assignee: UNIVERSITY OF MARYLAND BALTIMORE, GALEN James E, ventor(s): GALEN James E, atent and Priority Information (Country, Number, Date): WO 200032047 A1 20000608 (WO 0032047) Patent: WO 99US28499 19991202 (PCT/WO US9928499) Application: Priority Application: US 98204117 19981202; US 99158738 19991012 esignated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US US VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG ublication Language: English alltext Word Count: 34866 nglish Abstract The present invention relates generally to a Plasmid Maintenance System for the stabilization of expression plasmids encoding foreign antigens, and methods for making and using the Plasmid Maintenance System. The invention optimizes the maintenance of expression plasmids at two independent levels by: (1) removing sole dependence on balanced lethal maintenance functions; and (2) incorporating at least one plasmid partition function to prevent random segregation of expression plasmids, thereby enhancing their inheritance and stability. The Plasmid Maintenance System may be employed within a plasmid which has been recombinantly engineered to express a variety of expression products. rench Abstract L'invention concerne en general un systeme de stabilisation de plasmides, permettant de stabiliser des plasmides d'expression qui codent pour des antigenes etrangers, et des procedes de production et d'utilisation dudit systeme de stabilisation de plasmides. L'invention optimise la stabilisation de plasmides a deux niveaux independants: 1)

L'invention concerne en general un systeme de stabilisation de plasmides, permettant de stabiliser des plasmides d'expression qui codent pour des antigenes etrangers, et des procedes de production et d'utilisation dudit systeme de stabilisation de plasmides. L'invention optimise la stabilisation de plasmides a deux niveaux independants: 1) par elimination d'une dependance exclusive sur des fonctions de stabilisation letale equilibrees; et 2) par incorporation d'au moins une fonction de partition de plasmide, afin d'empecher la segregation aleatoire des plasmides d'expression, ce qui ameliore leur heredite et leur stabilite. Le systeme de stabilisation de plasmides peut etre utilise dans un plasmide qui a ete mis au point par genie genetique par recombinaison, afin d'exprimer une variete de produits d'expression.

9/3,AB/3 (Item 3 from file: 349)
IALOG(R)File 349:PCT FULLTEXT
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## 0420768

ISTIDINE-TAGGED SHIGA TOXINS, TOXOIDS, AND PROTEIN FUSIONS WITH SUCH TOXINS AND TOXOIDS, METHODS FOR THE PURIFICATION AND PREPARATION THEREOF

OXINES ET TOXOIDES SHIGA A MARQUES PAR L'HISTIDINE, FUSIONS DE PROTEINES AVEC CES TOXINES ET TOXOIDES, ET LEURS PROCEDES DE PURIFICATION ET DE PREPARATION

atent Applicant/Assignee:

HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE,

nventor(s):

O'BRIEN Alison D,

SCHMITT Clare K,

atent and Priority Information (Country, Number, Date):

Patent: WO 9811229 A2 19980319

Application: WO 97US15836 19970909 (PCT/WO US9715836)

Priority Application: US 9625637 19960910

esignated States: AU CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT

ublication Language: English ulltext Word Count: 8188

nglish Abstract

The present invention describes the isolation and purification of biologically and immunologically active histidine-tagged Shiga toxins ( %His%-tagged), a toxin associated with HC and the potentially life-threatening sequela HUS transmitted by strains of pathogenic bacteria. The present invention describes how %his%-tagging greatly simplifies and expedites purifying Shiga toxins, and describes an improved method for such purification. One aspect of the invention is obtaining and using Shiga toxoids that are immunoreactive but not toxic. Another aspect of the invention is obtaining and using fusion proteins of %His%-tagged Shiga toxins or toxoids. Yet another aspect of the invention is obtaining and using antibodies to %His%-gagged Shiga toxins, toxoids, or %Shiga% %toxin%/toxoid fusion proteins.

## rench Abstract

L'invention concerne l'isolement et la purification de toxines Shiga a activite biologique et immunologique, marquees par l'histine, une toxine associee a la colite hemorragique et a des sequelles du syndrome hemolytique et uremique potentiellement mortelles transmis par des souches de bacteries pathogenes. L'invention decrit comment ce marquage par l'histidine simplifie et accelere grandement la purification des toxines Shiga ainsi qu'un procede ameliore pour effectuer ladite purification. L'un des aspects de l'invention porte sur l'obtention et l'utilisation de toxoides Shiga immunoreactifs mais non toxiques. Un autre aspect de l'invention porte sur la production et l'utilisation de proteines fusionnees a des toxines ou toxoides Shiga marques par l'histine. L'invention porte en outre sur la production et sur l'utilisation d'anticorps anti toxines ou toxoides Shiga marques par l'histine ou anti proteines fusionnees a des toxines ou toxoides Shiga.

(Item 1 from file: 484) 9/3,AB/4 OIALOG(R)File 484:Periodical Abs Plustext c) 2004 ProQuest. All rts. reserv.

(USE FORMAT 7 OR 9 FOR FULLTEXT) 4485741 Interopathogenic Escherichia coli in Psittaciformes Schremmer, Caroline; Lohr, J E; Wastlhuber, U; Kosters, J; et al wian Pathology (AVP), v28 n4, p349-354, p.6 Aug 1999

ISSN: 0307-9457 JOURNAL CODE: AVP

DOCUMENT TYPE: Feature

RECORD TYPE: Fulltext; Abstract LANGUAGE: English

ORD COUNT: 4176

ABSTRACT: A total of 103 Escherichia coli isolates from psittaciform birds vere examined for the presence of genes coding for shigatoxin 1 (Stx1), shigatoxin 2 (%Stx2%) and for intimin (eae), using the polymerase chain eaction (PCR). Sixty-eight E. coli strains were isolated from necropsy cases and faecal samples, the other 35 were from 205 cloacal swabs from esittaciformes with various conditions.

ds

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Description
et
      Items
              SHIGA (1W) TOXIN
      20537
1
              S1 AND 2E (1W) SHIGA (1W) TOXIN
          1
2
        229
              S1 AND STX2E
              S3 AND STX2EB
          3
4
              RD (unique items)
          3
t s5/3, ab/1-3
>>No matching display code(s) found in file(s): 65, 128, 135, 180, 342,
 345, 398, 429
             (Item 1 from file: 349)
5/3, AB/1
IALOG(R) File 349:PCT FULLTEXT
c) 2004 WIPO/Univentio. All rts. reserv.
0763190
ECOMBINANT FUSION PROTEIN, (VACCINE) COMPOSITION CONTAINING THE SAME AND
  METHOD FOR THE PRODUCTION THEREOF
ROTEINE DE FUSION RECOMBINEE, COMPOSITION (DE VACCIN) CONTENANT CETTE
  DERNIERE ET PROCEDE DE PRODUCTION DE LADITE PROTEINE
EKOMBINANTES FUSIONSPROTEIN, DIESES ENTHALTENDE (IMPF-)STOFFZUSAMMENSETZUN
  G UND VERFAHREN ZU DESSEN HERSTELLUNG
Patent Applicant/Assignee:
LOHMANN ANIMAL HEALTH GMBH & CO KG, Heinz-Lohmann-Str. 4, D-27472
  Cuxhaven, DE, DE (Residence), DE (Nationality), (For all designated
  states except: US)
Patent Applicant/Inventor:
BALJER Georg, Ludwig-Rinn-Strasse 15, D-35452 Heuchelheim, DE, DE
   (Residence), DE (Nationality), (Designated only for: US)
FRANKE Sylvia, Elly-Heuss-Knapp-Weg 18, D-35396 Giessen, DE, DE
  (Residence), DE (Nationality), (Designated only for: US)
egal Representative:
SIEMONS Norbert, Neuer Wall 41, D-20354 Hamburg, DE
Patent and Priority Information (Country, Number, Date):
                       WO 200075345 A1 20001214 (WO 0075345)
Patent:
                       WO 2000EP5127 20000605 (PCT/WO EP0005127)
Application:
Priority Application: EP 99110759 19990604
Designated States: AU BY CN HU PL RU UA US
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: German
'iling Language: German
ulltext Word Count: 6025
Inglish Abstract
 The invention relates to a recombinant fusion protein, containing a
 subgenic %Stx2e% fragment of the %Shiga% %toxin% 2e (%Stx2e%) in fusion
 with a terminal tag, whose size corresponds approximately to that of the
 fragment or to a fraction of said fragment.
French Abstract
 L'invention concerne une proteine de fusion recombinee, comportant un
 fragment %Stx2e% subgenique de la toxine Shiga (%Stx2e%) en fusion avec
 une etiquette terminale dont la taille correspond approximativement a
 celle du fragment ou d'une fraction de fragment.
German Abstract
 Rekombinantes Fusionsprotein mit einem subgenischen %Stx2e%-Fragment des
 Shiga Toxins 2e (%Stx2e%) in Fusion mit einem terminalen Tag, dessen
 Grosse etwa der Grosse des Fragmentes oder eines Bruchteils des
 Fragmentes entspricht.
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01220293 Fusion protein comprising %Shiga% %toxin% 2e B subunit,

(Item 1 from file: 348)

(c) 2004 European Patent Office. All rts. reserv.

DIALOG(R) File 348: EUROPEAN PATENTS

5/3, AB/2

(vaccine) compositions comprising it, and methods for their production das Fragment B des Shigatoxins enthalt, onsprotein das (Impf-)Stoffzusammensetzung Verfahren zu dessen und enthaltende Herstellung eine de fusion comprenant le fragment B de la toxine de Shiga, preparation (vaccinale) la comprenant, et procede pour leur preparation NT ASSIGNEE: hmann Animal Health GmbH & Co. KG, (2189640), Heinz-Lohmann-Strasse 4, 27472 Cuxhaven, (DE), (Applicant designated States: all) NTOR: ljer, Georg, Prof.Dr., Ludwig-Rinn-Strasse 15, 35452 Heuchelheim, (DE) anke, Silvia, Dr., Elly-Heuss-Knapp-Weg 18, 35396 Giessen, (DE) L REPRESENTATIVE: tentanwalte Hauck, Graalfs, Wehnert, Doring, Siemons (100551), Neuer Wall 41, 20354 Hamburg, (DE) NT (CC, No, Kind, Date): EP 1057895 A1 001206 (Basic) ICATION (CC, No, Date): EP 99110759 990604; GNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; ; PT; SE NDED DESIGNATED STATES: LT; LV; MK; RO; SI RNATIONAL PATENT CLASS: C12N-015/62; C07K-014/245; A61K-038/16; 7K-016/12RACT EP 1057895 A1 (Translated) New fusion protein, useful as vaccines against pig edema disease, omprises fragment of %Shiga% %toxin% 2e fused to terminal tag A fusion protein (I) comprising a fragment of %Shiga% %toxin% 2e ( Stx2e%) fused to a terminal tag whose size is no greater than that of ne %Stx2e% fragment, is new. Independent claims are also included for the following: (1) a vaccine (II) comprising (I) for various uses in animal diseases sociated with edema; (2) a plasmid (III) comprising DNA encoding (I); (3) an Escherichia coli strain transformed with (III); (4) production of (I) by cloning a subunit of the %Stx2e% operon in a ector system, transforming an Escherichia coli strain with the resulting ecombinant plasmid, inducing the resulting expression system, and opressing and purifying the fusion protein; and (5) production of hybridoma clones for producing anti-%Stx2eB% mmunoglobulins by fusing spleen cells from mice immunized with (I) with reloma cells. ISLATED ABSTRACT WORD COUNT: 149 TRACT EP 1057895 A1 Rekombinantes Fusionsprotein mit einem subgenischen %Stx2e%-Fragment es Shiga Toxins 2e (%Stx2e%) in Fusion mit einem terminalen Tag, dessen cose etwa der Grose des Fragmentes oder eines Bruchteils des Fragmentes ntspricht. TRACT WORD COUNT: 31

GUAGE (Publication, Procedural, Application): German; German; German LTEXT AVAILABILITY:

Word Count ilable Text Language Update 200049 559 CLAIMS A (German) 2444 (German) 200049 SPEC A 3003 al word count - document A al word count - document B 3003 al word count - documents A + B

(Item 1 from file: 357) 3,AB/3LOG(R)File 357:Derwent Biotech Res. 2004 Thomson Derwent & ISI. All rts. reserv.

4643 DBR Accession No.: 2001-04397 fusion protein, useful as vaccines against edema disease, comprises fragment of %shiga% %toxin%-2e to terminal tag - %shiga% %toxin%-2e fragment useful as recombinant vaccine HOR: Baljer G; Franke S

PORATE SOURCE: Cuxhaven, Germany.

ENT ASSIGNEE: Lohmann-Animal-Health 2000

ENT NUMBER: EP 1057895 PATENT DATE: 20001206 WPI ACCESSION NO.:

2001-051987 (2007)

ORITY APPLIC. NO.: EP 99110759 APPLIC. DATE: 19990604 IONAL APPLIC. NO.: EP 99110759 APPLIC. DATE: 19990604

GUAGE: German

TRACT: A fusion protein (I) is claimed. (I) contains a fragment of \$Shiga% %toxin%-2e (%Stx2e%) fused to a terminal tag whose size is no greater than that of the %Stx2e% fragment. Also claimed are: a vaccine (II) containing DNA encoding (I); a Escherichia coli strain transformed with (III); production of (I) by cloning a subunit of the %Stx2e% operon in a vector system, transforming an E. coli strain with the resulting recombinant plasmid, including the resulting expression system, and expressing and purifying the fusion protein; and production of hybridoma clones for producing anti-%Stx2eB% immunoglobulins. (I) is useful for vaccinating animals, especially pigs, against edema disease, for detecting anti-%Stx2e% antibodies, for diagnosis of edema disease and for production of (I) and for affinity purification of the holotoxin. (15pp)

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Set Items Description
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cuting TD290
ight option is not available in file(s) 19, 398, 399
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      199307 2E
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       762528 TOXIN
           1 2E(1W)SHIGA(1W)TOXIN
           1 S1 AND 2E (1W) SHIGA (1W) TOXIN
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           (Item 1 from file: 399)
ALOG(R) File 399:CA SEARCH(R)
2004 American Chemical Society. All rts. reserv.
           CA: 139(18)274872h
                                 JOURNAL
.39274872
Binding of shiga toxin 2e to porcine erythrocytes in vivo and in vitro
AUTHOR(S): Matise, Ilze; Cornick, Nancy A.; Samuel, James E.; Moon,
ley W.
OCATION: Veterinary Medical Research Institute, Iowa State University,
es, IA, 50011, USA
JOURNAL: Infect. Immun. (Infection and Immunity) DATE: 2003 VOLUME: 71
TUMBER: 9 PAGES: 5194-5201 CODEN: INFIBR ISSN: 0019-9567 LANGUAGE:
lish PUBLISHER: American Society for Microbiology
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Items Index-term
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      2 AU=BALJER, GEORG 1945-
      1 AU=BALJER, G.
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      1 AU=BALJET A M C
      3 AU=BALJET A V
      1 AU=BALJET A.V.
      1 AU=BALJET AMC
      2 AU=BALJET ANTON
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 or undefined in one or more files.
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           2 AU=BALJER, GEORG 1945-
            1 AU=BALJER, G.
              E1-E5
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 S12
s12 and shiga
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              SHIGA
          49 S12 AND SHIGA
 S13
Duplicate detection is not supported for File 349.
Duplicate detection is not supported for File 398.
Duplicate detection is not supported for File 654.
Duplicate detection is not supported for File 348.
Duplicate detection is not supported for File 340.
Duplicate detection is not supported for File 342.
Duplicate detection is not supported for File 345.
Duplicate detection is not supported for File 286.
Duplicate detection is not supported for File 19.
Duplicate detection is not supported for File 128.
Duplicate detection is not supported for File 429.
Records from unsupported files will be retained in the RD set.
completed examining records
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 S14
            Description
     Items
     20537
             SHIGA (1W) TOXIN
             S1 AND 2E (1W) SHIGA (1W) TOXIN
       229
             S1 AND STX2E
             S3 AND STX2EB
             RD (unique items)
      2034
             S1 AND STX2
       132
             S6 AND S3
             S7 AND HIS
             RD (unique items)
             SHIGA (1W) TOXIN
     20537
       229
             S10 AND STX2E
             E1-E5
       284
             S12 AND SHIGA
        49
             RD (unique items)
        25
. s14/3,ab/1-25
No matching display code(s) found in file(s): 65, 128, 135, 180, 342,
345, 398, 429
            (Item 1 from file: 399)
/3,AB/1
LOG(R) File 399:CA SEARCH(R)
2004 American Chemical Society. All rts. reserv.
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d

s

9163548 CA: 139(11)163548n JOURNAL otoxin 1 from Escherichia coli affects Gb3/CD77+ bovine lymphocytes endent of interleukin-2, tumor necrosis factor- $\alpha$ , and rferon-α THOR(S): Menge, Christian; Stamm, Ivonne; Blessenohl, Maike; Wieler, ar H.; Baljer, Georg CATION: Institut fuer Hygiene und Infektionskrankheiten der Tiere, ıs-Liebig-Universitaet, Giessen, Germany, D-35392 JRNAL: Exp. Biol. Med. (Maywood, NJ, U. S.) (Experimental Biology and ine (Maywood, NJ, United States)) DATE: 2003 VOLUME: 228 NUMBER: 4 3ES: 377-386 CODEN: EBMMBE ISSN: 1535-3702 LANGUAGE: English BLISHER: Society for Experimental Biology and Medicine B, AB/2 (Item 2 from file: 399) DG(R)File 399:CA SEARCH(R) 2004 American Chemical Society. All rts. reserv. 8220287 CA: 138(15)220287g vine lymphocytes express functional receptors for Escherichia coli a toxin 1 THOR(S): Stamm, Ivonne; Wuhrer, M.; Geyer, R.; Baljer, G.; Menge, Ch. CATION: Institut fur Hygiene und Infektionskrankheiten der Tiere der us-Liebig-Universitat, Giessen, Germany, URNAL: Microb. Pathog. (Microbial Pathogenesis) DATE: 2002 VOLUME: 33 MBER: 6 PAGES: 251-264 CODEN: MIPAEV ISSN: 0882-4010 BLISHER ITEM IDENTIFIER: 0882-4010(02)90527-9 LANGUAGE: English BLISHER: Elsevier Science Ltd. (Item 3 from file: 399) 3,AB/3OG(R)File 399:CA SEARCH(R) 2004 American Chemical Society. All rts. reserv. 5031105 CA: 135(3)31105y JOURNAL e AIDA autotransporter system is associated with F18 and Stx2e in erichia coli isolates from pigs diagnosed with edema disease and weaning diarrhea

THOR(S): Niewerth, Ulla; Frey, Andreas; Voss, Thomas; Le Bouguenec, tal; Baljer, Georg; Franke, Sylvia; Schmidt, M. Alexander CATION: Institut fur Infektiologie, Zentrum fur Molekularbiologie der undung, Westfalische Wilhelms-Universitat, Munster, Germany, D-48149 URNAL: Clin. Diagn. Laboratory Immunol. DATE: 2001 VOLUME: 8 NUMBER: 1 GES: 143-149 CODEN: CDIMEN ISSN: 1071-412X LANGUAGE: English BLISHER: American Society for Microbiology

3,AB/4 (Item 4 from file: 399) OG(R)File 399:CA SEARCH(R) 2004 American Chemical Society. All rts. reserv.

4016533 CA: 134(2)16533x PATENT sion proteins of subunit B of Shiga toxin 2e and an affinity label and applicants r preparation and vaccine use VENTOR(AUTHOR): Baljer, Georg; Franke, Silvia CATION: Germany,

SIGNEE: Lohmann Animal Health G.m.b.H. & Co. K.-G. TENT: European Pat. Appl. ; EP 1057895 A1 DATE: 20001206

PLICATION: EP 99110759 (19990604)

GES: 15 pp. CODEN: EPXXDW LANGUAGE: German CLASS: C12N-015/62A; -014/245B; A61K-038/16B; C07K-016/12B DESIGNATED COUNTRIES: AT; BE; CH ; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE; MC; PT; IE; SI; LT; LV; FI;

3,AB/5 (Item 5 from file: 399) OG(R)File 399:CA SEARCH(R) 2004 American Chemical Society. All rts. reserv.

```
CA: 131(6)72639m
                                JOURNAL
1072639
iga toxin 1 from Escherichia coli blocks activation and proliferation
ovine lymphocyte subpopulations in vitro
THOR(S): Menge, C.; Wieler, L. H.; Schlapp, T.; Baljer, G.
CATION: Institut fur Hygiene und Infektionskrankheiten der Tiere der,
sen, Germany, D-35392
URNAL: Infect. Immun. DATE: 1999 VOLUME: 67 NUMBER: 5 PAGES:
-2217 CODEN: INFIBR ISSN: 0019-9567 LANGUAGE: English PUBLISHER:
ican Society for Microbiology
           (Item 6 from file: 399)
3,AB/6
OG(R)File 399:CA SEARCH(R)
2004 American Chemical Society. All rts. reserv.
                               JOURNAL
           CA: 126(6)71050x
6071050
iga toxin-producing Escherichia coli strains from bovines: association
dhesion with carriage of eae and other genes
THOR(S): Wieler, L. H.; Vieler, E.; Erpenstein, C.; Schlapp, T.; nrueck, H.; Bauerfeind, R.; Byomi, A.; Baljer, G.
CATION: Institut fur Hygiene und Infektionskrankheiten der Tiere der
ersitat Giessen, Giessen, Germany, D-35392
URNAL: J. Clin. Microbiol. DATE: 1996 VOLUME: 34 NUMBER: 12 PAGES:
-2984 CODEN: JCMIDW ISSN: 0095-1137 LANGUAGE: English PUBLISHER:
ican Society for Microbiology
           (Item 7 from file: 399)
3,AB/7
OG(R)File 399:CA SEARCH(R)
2004 American Chemical Society. All rts. reserv.
                                  JOURNAL
5320242
           CA: 125(25)320242p
e enterohemolysin phenotype of bovine Shiga-like toxin-producing
erichia coli (SLTEC) is encoded by the EHEC-hemolysin gene
THOR(S): Wieler, Lothar H.; Tigges, Magdalene; Ebel, Frank;
eferkordt, Silke; Djafari, Soudabeh; Schlapp, Tobias; Baljer, Georg;
raborty, Trinad
CATION: Institut fur Hygiene und Infektionskrankheiten der Tiere,
us-Liebig-Universitat Giessen, Giessen, Germany, 35392
URNAL: Vet. Microbiol. DATE: 1996 VOLUME: 52 NUMBER: 1,2 PAGES:
164 CODEN: VMICDQ ISSN: 0378-1135 LANGUAGE: English
           (Item 8 from file: 399)
3,AB/8
OG(R) File 399:CA SEARCH(R)
2004 American Chemical Society. All rts. reserv.
           CA: 123(7)79421c
                                JOURNAL
3079421
sociation of enterohemolysin and non-fermentation of rhamnose and
ose with Shiga-like toxin genes in Escherichia coli from calves
THOR(S): Wieler, L. H.; Bauerfeind, R.; Weiss, R.; Pirro, F.; Baljer,
CATION: Institut fur Hygiene und Infektionskrankheiten der Tiere,
us-Liebig-Universitat Giessen, Giessen, Germany, D-35392
OURNAL: Zentralbl. Bakteriol. DATE: 1995 VOLUME: 282 NUMBER: 3
AGES: 265-74 CODEN: ZEBAE8 ISSN: 0934-8840 LANGUAGE: English
'3,AB/9
           (Item 9 from file: 399)
LOG(R) File 399:CA SEARCH(R)
2004 American Chemical Society. All rts. reserv.
                                  JOURNAL
           CA: 122(15)184960e
22184960
onstruction of recombinant Shiga-like toxin-IIv (SLT-IIv) and its use in
toring the SLT-IIv antibody status of pigs
JTHOR(S): Franke, Sylvia; Gunzer, Florian; Wieler, Lothar H.; Baljer,
rg; Karch, Helge
CATION: Institut Hygiene und Mikrobiologie, Universitaet Wuerzburg,
zburg, Germany, 97080
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JOURNAL: Vet. Microbiol. DATE: 1995 VOLUME: 43 NUMBER: 1 PAGES: 41-52

CODEN: VMICDQ ISSN: 0378-1135 LANGUAGE: English (Item 10 from file: 399) 4/3,AB/10 ALOG(R)File 399:CA SEARCH(R) ) 2004 American Chemical Society. All rts. reserv. CA: 117(15)147078z 117147078 Characterization of shiga-like toxin producing Escherichia coli (SLTEC) olated from calves with and without diarrhoea AUTHOR(S): Wieler, Lothar H.; Bauerfeind, Rolf; Baljer, Georg LOCATION: Inst. Hyg. Infektionskrankh. Tiere, Justus-Liebig-University, essen, Germany, W 6300 JOURNAL: Zentralbl. Bakteriol. DATE: 1992 VOLUME: 276 NUMBER: 2 PAGES: 243-53 CODEN: ZEBAE8 ISSN: 0934-8840 LANGUAGE: English (Item 1 from file: 162) 4/3,AB/11 ALOG(R)File 162:Global Health ) 2004 CAB International. All rts. reserv. CAB Accession Number: 20002013740 723208 Enterohemorrhagic Escherichia coli (EHEC) strains of serogroup 0118 isplay three distinctive clonal groups of EHEC pathogens. Wieler, L. H.; Busse, B.; Steinruck, H.; Beutin, L.; Weber, A.; Karch, .; Baljer, G. Institut fur Mikrobiologie und Tierseuchen, Freie Universitat Berlin, 0115 Berlin, Germany. Journal of Clinical Microbiology volume 38 (6): p.2162-2169 Publication Year: 2000 ISSN: 0095-1137 Language: English Document Type: Journal article

A recent case report of a child infected with enterohaemorrhagic scherichia coli (EHEC) of serotype 0118:H16 in Bavaria, in association ith the isolation of a bovine 0118 strain on the same farm (A. Weber t.al. Berl. Muench. Tieraerztl. Wochenschr. (1997) 110, 211-213), rompted us to investigate the relationship between bovine and human tains of serogroup O118. A total of 29 human O118 E. coli strains from urope (21), Canada (4), and Peru (4) were compared by virulence typing nd macrorestriction analysis with 7 bovine 0118 EHEC strains isolated in avaria during 1989-97. 25 of the human strains were characterized as HEC. By serotyping and determination of the virulence-associated factors toxin (stx1 stx2 stx2 variants), intimin (eae), and EHEC Shiga% aemolysin (HlyEHEC), 3 distinctive groups of O118 human pathogens were dentified. Most of the strains belonged to serotype O118:H16, displaying he virulence traits Stx1, intimin, HlyEHEC, and EspP/PssA (group 1). In ddition, we identified strains of serotype O118:H12 (Stx2d only; group 2) nd of serotype Oll8:H30 (Stx2 and intimin; group 3). Macrorestriction nalysis with BlnI and XbaI revealed that all strains with a single O118 erotype profile (0118:H12, 0118:H16, and 0118:H30) belonged to one clonal luster, irrespective of their origin. Group 1 strains clustered in the ame clonal group as the bovine 0118:H16 strains. Moreover, 4 pairs of trains of different origins and indistinguishable by all other methods pplied were identified as group 1 strains. Our data support the direct ransmission of an EHEC 0118:H16 strain from a calf to a 2-year-old boy in he above-mentioned case report. Since bovine and human 0118:H16 strains the same clones, they must be considered zoonotic EHEC epresent athogens. In contrast, EHEC strains of serotypes 0118:H12 and 0118:H30 lave been isolated only from humans, indicating a reservoir for certain uman 0118 EHEC strains other than bovines. 37 reference

4/3,AB/12 (Item 2 from file: 162) ALOG(R)File 162:Global Health ) 2004 CAB International. All rts. reserv. Neutralizing antibodies against %Shiga%-like toxins from Escherichia coli in colostra and sera of cattle.

Pirro, F.; Wieler, L. H.; Failing, K.; Bauerfeind, R.; Baljer, G.

Institut fur Hygiene und Infektionskrankheiten der Tiere, 35392 Giessen, Frankfurter Str. 89-91, Germany.

Veterinary Microbiology volume 43 (2/3): p.131-141

Publication Year: 1995

ISSN: 0378-1135 Language: English

Document Type: Journal article

Previous or present infection with %Shiga%-like toxin producing E. coli (SLTEC) was detected by an indirect neutralization assay of antibody titre. Bovine colostra and sera blocked the cytotoxic effects of %Shiga% -like toxin on Vero cell monolayers. SLT neutralizing antibodies were present in 84.0% (189/225) of the colostrum samples from randomly chosen cows in Bavaria, Germany. While all of the colostra with neutralizing activity reacted with SLT-I, only 14.7% neutralized both SLT-I and -II. Approximately 93.0% (37/40) of sera from heifers had SLT neutralizing activity. To quantify the neutralizing antibodies, colostra were tested in the Vero cell assay for their capability to reduce the 50% cytotoxic dose (CD50) of SLT standards, where the neutralizing units/ml (nu/ml) equal the log10 of CD50 reduction. Almost half of reactive colostra (48.7%) reduced the CD50 of the SLT-I standard by 104 to 105 (4-5 nu/ml). Higher reactivity (5-7 nu/ml) was found in 46.5% of positive colostra. The remaining colostra samples had over 7 nu/ml. To determine if the colostra were blocking receptors for SLT on Vero cells, cells were preincubated with colostra, and SLT was later added. No neutralizing activity was detected, indicating the reactivity of colostra was directed against SLT. When the colostra were subjected to ammonium sulphate precipitation and DEAE anion exchange chromatography, high levels of neutralizing activity were found in the IgG1 containing fractions. Colostrum fractions were tested for SLT-I binding antibodies in a capture ELISA, based on the binding of SLT-I to the toxin receptor analogue P1-glycoprotein. Only fractions from colostra with over 5 nu/ml were reactive in this assay, indicating the ELISA was less sensitive than the Vero cell assay. The results support the theory that SLTEC exposure of cows in Germany is more widespread than expected from epidemiological studies based on bacterial isolation. This possibly indicated a higher risk of human SLTEC infection via beef and milk products. 38 reference

14/3,AB/13 (Item 1 from file: 50)
DIALOG(R)File 50:CAB Abstracts

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04130001 CAB Accession Number: 20013154900

Globotriaosylceramide (Gb3/CD77) is synthesized and surface expressed by bovine lymphocytes upon activation in vitro.

Menge, C.; Stamm, I.; Wuhrer, M.; Geyer, R.; Wieler, L. H.; Baljer, G. Faculty of Veterinary Medicine, Institute for Hygiene and Infectious Diseases of Animals, Justus-Liebig-University, Frankfurter Str. 89-91,

D-35392 Giessen, Germany.

Veterinary Immunology and Immunopathology volume 83 (1/2): p.19-36

Publication Year: 2001 ISSN: 0165-2427 --

Language: English

Document Type: Journal article

Neutral glycosphingolipids (GSLs) are considered activation markers on human lymphocytes, which are fundamental for studying the immune system. For cattle, only a limited number of activation markers has yet been identified. We recently showed that \$Shiga\$ toxin 1, known to use globotriaosylceramide (Gb3 syn. CD77) as a cellular receptor, depresses proliferation of activated bovine lymphocytes (Infect. Immunol. 67 (1999b) 2209). In order to confirm the expression of Gb3/CD77 on bovine lymphocytes, we flowcytometrically examined a bovine B-lymphoma cell line (BL-3) and bovine peripheral blood mononuclear cells (PBMC) before and after mitogenic stimulation and biochemically characterized neutral GSLs extracted from PBMC. CD77 was detected on the surface of BL-3 cells and cultured PBMC essentially after mitogenic stimulation. Although expressed

y all PBMC subpopulations identified, the portion of CD77+ cells was ighest for BoCD8+ cells, followed by B-cells and BoCD4+ cells at day 4 of ultivation. Ceramide trihexoside of stimulated PBMC was structurally 1-4) Gal (1-4) Glc (1-1) ceramide alpha Gal( etermined as iochemically, Gb3 was also detected within unstimulated PBMC which ontained ceramide monohexoside (CMH) and Gb3 in a ratio of about 4 : 1. owever, stimulation induced an increase of CMH and Gb3 by a factor of 2.5 nd 10, respectively, implicating that bovine lymphocytes regulate surface xpression of Gb3/CD77 predominantly by quantitative changes in the Gb3 etabolism. This report presents Gb3/CD77 as the first GSL identified on ovine immune cells and highly recommends this activation dependent ntigen as a useful tool to investigate lymphocyte activation within the ovine immune system. 40 reference

(Item 2 from file: 50) 4/3, AB/14ALOG(R)File 50:CAB Abstracts ) 2004 CAB International. All rts. reserv. CAB Accession Number: 982211519 586062 Virulence properties of %Shiga% toxin-producing Escherichia coli (STEC) trains of serogroup Oll8, a major group of STEC pathogens in calves. Wieler, L. H.; Schwanitz, A.; Vieler, E.; Busse, B.; Steinruck, H.; Kaper, J. B.; Baljer, G. Institut fur Hygiene und Infektionskrankheiten der Tiere, University of Giessen, D-35392 Giessen, Berlin, Germany. Journal of Clinical Microbiology volume 36 (6): p.1604-1607 Publication Year: 1998 ISSN: 0095-1137 Language: English Document Type: Journal article To define their virulence properties, 42 0118 (38 0118:H16 and 4 0118:H-) strains isolated from calves (35 calves with diarrhoea and 5 vithout) displayed 3 different Stx combinations (Stx1 (36 of 42), Stx1 and Stx2 (2 of 42), and Stx2 (4 of 42)). A total of 41 strains (97.6%) narboured a large virulence-associated plasmid containing hlyEHEC (hly from enterohaemorrhagic E. coli). The strains' adhesive properties varied n relation to the eukaryotic cells tested. Only 28 of 42 strains (66.7%) showed localized adhesion (LA) in the human HEp-2 cell line. In contrast, un bovine fetal calf lung (FCL) cells, the number of LA-positive strains was much higher (37 of 42 (88.1%)). The locus of enterocyte effacement (LEE) was detected in 41 strains (97.6%). However, not all LEE-positive strains reacted positively in the fluorescence actin-staining (FAS) test, which indicated the attaching and effacing (AE) lesion. In HEp-2 cells, only 22 strains (52.4%) were FAS positive, while in FCL cells, the number of FAS-positive strains was significantly higher (38 of 42). It is concluded that most of the Oll8 STEC strains from calves (41 of 42 (97.6%)) have a high virulence potential (stx, hlyEHEC, and LEE). This

14/3,AB/15 (Item 3 from file: 50)
IALOG(R)File 50:CAB Abstracts
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3014468 CAB Accession Number: 952207133

Investigations on the immune response during oedema disease of weaned piglets by using a recombinant B subunit of %Shiga%-like toxin IIe.

virulence potential and the high prevalence of STEC 0118 strains in calves suggest that these strains could be a major health threat for humans in the future. In addition, the poor association between results of the genoand phenotypical tests to screen for the AE ability of STEC strains calls

the diagnostic value of the FAS test into question. 31 reference

Original Title: Untersuchungen zur Immunantwort der Odemkrankheit von Absetzferkeln mit einer rekombinanten B-Untereinheit des %Shiga% -like-Toxins-IIe.

Wieler, L. H.; Franke, S.; Menge, C.; Rose, M.; Bauerfeind, R.; Karch, H.; Baljer, G.

Institut fur Hygiene und Infekionskrankheiten der Tiere, Justus-Liebig-Universitat, Frankfurter Str. 89-91, D-35392 Giessen, Germany.

Deutsche Tierarztliche Wochenschrift volume 102 (1): p.40-43

Publication Year: 1995

ISSN: 0341-6593 --

Language: German Summary Language: english

Document Type: Journal article

An outbreak of oedema disease (ED) was monitored in 80 weaned piglets over a period of 4 weeks. The shedding of %Shiga%-like toxin-IIe-producing Escherichia coli strains, the serum bactericidal activity (SBA) against SLTEC-Ile, and the antibody response against SLTEC-Ile was monitored by utilizing a glutathione-S-transferase (GST) + SLT-IIeB/SUB fusion protein for immunoblot assays. E. coli strain GO15111 (O141:K85ac) was diagnosed SLT-IIe-producing E. coli by polymerase chain reaction, DNA hybridization and cytotoxicity assays, Maximum excretion of GO15111 appeared between days 8 and 15 after weaning. On day 1 after weaning no piglet shed GO15111, while the number increased on day 8 to 53 (66.2%) and on day 15 to 59 (73.8%) of the piglets. 4 weeks after weaning GO15111 was isolated from only 23 (28.8%) of the piglets. In parallel, serum bactericidal activity against GO15111 increased significantly in the sera of 73 (91.2%) piglets, reaching a stable maximum from day 15 on. During the first 2 weeks after weaning no piglet yielded detectable SLT-IIe-IgG. However the number of SLT-IIe-IgG positive piglets increased steadily from day 15. On day 15, 5 (62%) piglets were positive in SLT-IIe immunoblot analysis and 29 days after weaning the number increased to 31 (38.8%). It was concluded that the recombinant protein was a useful diagnostic tool for monitoring the specific antibody status of piglets. 27 reference

14/3,AB/16 (Item 4 from file: 50)
IALOG(R)File 50:CAB Abstracts
c) 2004 CAB International. All rts. reserv.

2674910 CAB Accession Number: 932232264

Importance and diagnosis of infections of farm animals with Escherichia

coli strains producing %Shiga%-like toxin.

Original Title: Zur Bedeutung und Diagnostik von Infektionen landwirtschaftlicher Nutztiere mit %Shiga%-like-Toxin- produzierenden E. coli (SLTEC).

Wieler, L. H.; Bauerfeind, R.; Baljer, G.

Tierarztliche Umschau volume 47 (7): p.524-528, 533

Publication Year: 1992 --

Language: German Summary Language: english

Document Type: Journal article

14/3,AB/17 (Item 5 from file: 50)
IALOG(R)File 50:CAB Abstracts
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2461591 CAB Accession Number: 912255786

Characteristics of alpha -hemolytic strains of Escherichia coli isolated from dogs with gastroenteritis.

Prada, J.; Baljer, G.; Rycke, J. de; Steinruck, H.; Zimmermann, S.; Stephan, R.; Beutin, L.

Robert Koch-Institut des Bundesgesundheitsamtes, Nordufer 20, D-1000 Berlin 65, Germany.

Veterinary Microbiology volume 29 (1): p.59-73

Publication Year: 1991

ISSN: 0378-1135 --Language: English

Document Type: Journal article

In studies of the virulence markers and phenotypic properties of 24 haemolysin producing (Hly+) strains of E. coli isolated from dogs with gastroenteritis, the strains were distributed over 11 known E. coli O-serogroups and most of them were heterogeneous for their phenotypes. All strains were found to produce alpha -haemolysin which was detected by Southern hybridization and colony immunoblotting using a specific gene probe and a monoclonal antibody. Eight strains were carrying plasmids encoding alpha -haemolysin sequences (hly-plasmids) and 16 strains carried

hromosomal hly-determinants. 12 of the strains showed enterotoxic ctivities which were tested for in different assays. Among these, three 42:H37 and two 070:H- strains carrying hly-plasmids were found to harbour ther plasmids encoding the heat-stable enterotoxin STA1. The other 7 trains showing enterotoxicity in the ileal loop or the suckling mouse ssay were negative for STA1, STA2 or LT. None of the 24 strains was ositive for invasiveness or for production of Vero (%Shiga%-like) toxins. he production of alpha -haemolysin was closely associated with the roduction of cytotoxic necrotizing factor (CNF), which was detected in 17 f 24 strains. Of these, 16 elaborated CNF1 and one strain produced an nknown CNF type. Surprisingly, all strains carrying ST-plasmids and 6 of strains carrying hly-plasmids were negative for CNF. It is concluded hat in canine E. coli strains CNF production seems to be closely associated with production of chromosomally encoded alpha -haemolysing whereas hly-plasmids are more often associated with ST-producing CNF egative isolates. 46 reference

(Item 6 from file: 50) .4/3,AB/18 ALOG(R) File 50: CAB Abstracts e) 2004 CAB International. All rts. reserv.

CAB Accession Number: 902222948 277510

Demonstration of verotoxin production by Escherichia coli by a cell culture test and DNA hybridization applied to faeces from calves with liarrhoea.

Nachweis von Vero- (%Shiga%-like-) toxinbildenden E.-Original Title: coli-Keimen (VTEC) mittels Zellkulturtest und DNA- Hybridisierung bei durchfallkranken Kalbern.

Baljer, G.; Wieler, L.; Bauerfeind, R.; Ludwig, S. W.; Mayr, A.

Institut Pathologie, Oberer Eselsberg M23, D-7900 Ulm, German Federal Republic.

Tierarztliche Umschau volume 45 (2): p.71...78

Publication Year: 1990 --

Language: German Summary Language: english

Document Type: Journal article

Verotoxin-forming strains of E. coli (responsible for haemorrhagic colitis in human beings) have been isolated from meat samples, and have been found in the faeces of calves in the USA and UK. In the Federal Republic of Germany, 150 strains isolated in 1985-1988 were negative, but of 256 strains isolated since 1988 produced verotoxin, mostly of type 24 reference

(Item 7 from file: 50) 14/3,AB/19 IALOG(R)File 50:CAB Abstracts c) 2004 CAB International. All rts. reserv.

CAB Accession Number: 872200856 1892640

Attaching and effacing bacteria in the intestines of calves and cats with diarrhea.

Pospischil, A.; Mainil, J. G.; Baljer, G.; Moon, H. W.

Dr. H.W. Moon, Nat. Anim. Dis. Center, PO Box 70, Ames, IA 50010, USA.

Veterinary Pathology volume 24 (4): p.330-334

Publication Year: 1987

ISSN: 0300-9858 Language: English

Document Type: Journal article

Histopathological and electron microscopic examination of intestines of three calves and two cats revealed attaching effacing bacteria characteristic of enteropathogenic Escherichia coli (EPEC) in ileum, caecum and colon. The bacteria in one of the calves contained bacteriophages, and an E. coli isolate from that calf produced %Shiga% -like toxin. These findings contribute to emerging evidence that attaching effacing intestinal bacteria are globally distributed pathogens in a variety of host species and that bacteriophage-mediated production of Shiga%-like toxin is related to the virulence of such bacteria. 27 reference

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(Item 1 from file: 10)
4/3,AB/20
ALOG(R) File 10:AGRICOLA
) format only 2004 The Dialog Corporation. All rts. reserv.
03981 23279386 Holding Library: AGL
Globotriaosylveramide (Gb3/CD77) is synthesized and surface expressed by
ovine lymphocytes upon activation in vitro
Menge, C. Stamm, I.; Wuhrer, M.; Geyer, R.; Wieler, L.H.; &Baljer, G.&
Amsterdam : Elsevier.
Veterinary immunology and immunopathology. Nov 2001. v. 83 (1/2) p.
9-36.
                     CODEN: VIIMDS
ISSN: 0165-2427
DNAL CALL NO: SF757.2.V38
Language: English
Neutral glycosphingolipids (GSLs) are considered activation markers on
uman lymphocytes, which are fundamental for studying the immune system.
or cattle, only a limited number of activation markers has yet been
dentified. We recently showed that %Shiga% toxin 1, known to use lobotriaosylceramide (Gb3 syn. CD77) as a cellular receptor, depresses
coliferation of activated bovine lymphocytes [Infect. Immunol. 67 (1999b)
      In order to confirm the expression of Gb3/CD77 on bovine
209].
mphocytes, we flow cytometrically examined a bovine B-lymphoma cell line 3L-3) and bovine peripheral blood mononuclear cells (PBMC) before and
ter mitogenic stimulation and biochemically characterized neutral GSLs tracted from PBMC. CD77 was detected on the surface of BL-3 cells and
ultured PBMC essentially after mitogenic stimulation. Although expressed
all PBMC subpopulations identified, the portion of CD77(+) cells was
ighest for BoCD8(+) cells, followed by B-cells and BoCD4(+) cells at day 4
f cultivation. Ceramide trihexoside of stimulated PBMC was structurally
etermined as Gal(alpha1-4)Gal(1-4)Glc(1-1)ceramide (Gb3). Biochemically, o3 was also detected within unstimulated PBMC which contained ceramide prohexoside (CMH) and Gb3 in a ratio of about 4:1. However, stimulation
nduced an increase of CMH and Gb3 by a factor of 2.5 and 10, respectively,
mplicating that bovine lymphocytes regulate surface expression of Gb3/CD77
redominantly by quantitative changes in the Gb3 metabolism. This report resents Gb3/CD77 as the first GSL identified on bovine immune cells and ighly recommends this activation dependent antigen as a useful tool to
nvestigate lymphocyte activation within the bovine immune system.
                (Item 1 from file: 65)
14/3,AB/21
IALOG(R) File 65: Inside Conferences
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          INSIDE CONFERENCE ITEM ID: CN023167076
2210811
ffects of %Shiga%-like Toxin-I on Bovine Peripheral Immune Cells:
vidence for a Mode of Action Different from Cytotoxicity
Menge, C.; Wieler, L. H.; Schlapp, T.; %Baljer, G.%
CONFERENCE: Bacterial protein toxins-European workshop; 7th
ZENTRALBLATT FUR BAKTERIOLOGIE -SUPPLEMENT-, 1996; SUPPL 28 P: 245-246
Gustav Fischer, 1996
ISSN: 0941-018X ISBN: 3437117335; 1560814454
LANGUAGE: English DOCUMENT TYPE: Conference Papers
  CONFERENCE EDITOR(S): Frandsen, P. L.
  CONFERENCE DATE: Jul 1995 (199507) (199507)
NOTE:
  Held at Hindsgavl; Denmark
                 (Item 2 from file: 65)
14/3,AB/22
IALOG(R) File 65: Inside Conferences
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          INSIDE CONFERENCE ITEM ID: CN007421450
0760172
lassification of bovine %Shiga%-like toxin (verocytotoxin)- producing
scherichia coli by cell culture assays and PCR
Wieler, L. H.; Schlapp, T.; Erpenstein, C.; &Baljer, G.&
CONFERENCE: Recent advances in verocytotoxin-producing Escherichia coli
   infections-2nd International symposium and workshop on verocytotoxin (
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Shiga-like toxin) -producing Escherichia coli infections
 EXCERPTA MEDICA INTERNATIONAL CONGRESS SERIES, 1994; VOL 1072 P: 291-294
 Amsterdam, New York, Elsevier, 1994
 ISSN: 0531-5131 ISBN: 0444818405
 LANGUAGE: English DOCUMENT TYPE: Conference Papers
   CONFERENCE EDITOR(S): Karmali, M. A.; Goglio, A. G.
   CONFERENCE LOCATION: Bergamo, Italy
   CONFERENCE DATE: Jun 1994 (199406) (199406)
   Also known as VTEC '94
14/3,AB/23
               (Item 3 from file: 65)
OIALOG(R) File 65: Inside Conferences
c) 2004 BLDSC all rts. reserv. All rts. reserv.
          INSIDE CONFERENCE ITEM ID: CN007421217
0760148
In vitro-studies on the effect of %Shiga%-like toxin-I ( verocytotoxin 1)
on bovine peripheral immune blood cells
 Menge, C.; Wieler, L. H.; Schlapp, T.; %Baljer, G.%
 CONFERENCE: Recent advances in verocytotoxin-producing Escherichia coli
   infections-2nd International symposium and workshop on verocytotoxin (
   Shiga-like toxin)-producing Escherichia coli infections
 EXCERPTA MEDICA INTERNATIONAL CONGRESS SERIES, 1994; VOL 1072 P: 179-184
 Amsterdam, New York, Elsevier, 1994
 ISSN: 0531-5131 ISBN: 0444818405
 LANGUAGE: English DOCUMENT TYPE: Conference Papers
   CONFERENCE EDITOR(S): Karmali, M. A.; Goglio, A. G.
   CONFERENCE LOCATION: Bergamo, Italy
   CONFERENCE DATE: Jun 1994 (199406) (199406)
 NOTE:
   Also known as VTEC '94
               (Item 1 from file: 203)
14/3,AB/24
OIALOG(R) File 203:AGRIS
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01939747 AGRIS No: 95-161171
  Investigations on the immunoresponse during edema disease of piglets
after weaning by using a recombinant B subunit of %Shiga%-like toxin IIe
Jntersuchungen zur Immunantwort bei der Oedemkrankheit von Absetzferkeln
nit einer rekombinanten B-Untereinheit des %Shiga%-like-Toxins-IIe)
  Wieler, L.H. (Goettingen University (Germany). Inst. fuer Hygiene und
Infektionskrankheiten der Tiere); Franke, S.; Menge, C.; Rose, M.;
Bauerfeind, R.; Karch, H.; Baljer, G.
  Journal: Deutsche Tieraerztliche Wochenschrift, 1995, v. 102(1) p. 40-43
                    Summary Language: German, English
  Language: German
               (Item 2 from file: 203)
14/3,AB/25
DIALOG(R) File 203:AGRIS
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01481845 AGRIS No: 90-136371
  Demonstration of verotoxin producing Escherichia coli (VTEC) in cell
cultures and DNA-hybridization in calf faeces (Nachweis von Vero- (%Shiga%
-Like-) toxinbildenden E.-coli-Keimen (VTEC) mittels Zellkulturtest und
ONA-Hybridisierung bei durchfallkranken Kaelbern)
  Baljer, G. (Ulm Universitaet (Germany, F.R.). Institut fuer Pathologie
und Rechtsmedizin); Wieler, L; Bauerfeind, R.; Ludwig, S.B.; Mayr, A.
  Journal: Tieraerztliche Umschau, 1990, v. 45(2) p. 71-78
                      Summary Language: German, English
  Language: German
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Items Index-term
ef
        4 AU=FRANKE, STEVEN J
25
       10 AU=FRANKE, STEVEN J.
26
       1 AU=FRANKE, STEVEN JOHN
27
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        3 AU=FRANKE, SUSANNE
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t s16/3,ab/1-12
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 345, 398, 429
              (Item 1 from file: 399)
16/3, AB/1
OIALOG(R)File 399:CA SEARCH(R)
(c) 2004 American Chemical Society. All rts. reserv.
              CA: 140(8)107952y
                                   JOURNAL
140107952
First step towards a quantitative model describing Czc-mediated heavy
netal resistance in Ralstonia metallidurans
AUTHOR(S): Legatzki, Antje; Franke, Sylvia; Lucke, Susann; Hoffmann, Toni
· Anton, Andreas; Neumann, Dieter; Nies, Dietrich H.
LOCATION: Institut fuer Mikrobiologie, Halle, Germany, 06099
 JOURNAL: Biodegradation (Biodegradation) DATE: 2003 VOLUME: 14
NUMBER: 2 PAGES: 153-168 CODEN: BIODEG ISSN: 0923-9820 LANGUAGE:
English PUBLISHER: Kluwer Academic Publishers
              (Item 2 from file: 399)
16/3, AB/2
DIALOG(R) File 399:CA SEARCH(R)
(c) 2004 American Chemical Society. All rts. reserv.
              CA: 135(26)367592z
                                    JOURNAL
 135367592
 The product of the ybdE gene of the Escherichia coli chromosome is
involved in detoxification of silver ions
 AUTHOR(S): Franke, Sylvia; Grass, Gregor; Nies, Dietrich H.
 LOCATION: Institut fur Mikrobiologie der Martin-Luther-Universitat
Halle-Wittenberg, Halle, Germany, 06099
JOURNAL: Microbiology (Reading, U. K.) DATE: 2001 VOLUME: 147 NUMBER:
PAGES: 965-972 CODEN: MROBEO ISSN: 1350-0872 LANGUAGE: English
PUBLISHER: Society for General Microbiology
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(Item 3 from file: 399)
5/3, AB/3
ALOG(R) File 399:CA SEARCH(R)
2004 American Chemical Society. All rts. reserv.
            CA: 135(19)269790t
                                   JOURNAL
L35269790
ZitB (YbgR), a member of the cation diffusion facilitator family, is an
ditional zinc transporter in Escherichia coli
AUTHOR(S): Grass, Gregor; Fan, Bin; Rosen, Barry P.; Franke, Sylvia;
es, Dietrich H.; Rensing, Christopher
LOCATION: Department of Soil, Water, University of Arizona, Tucson, AZ,
721, USA
JOURNAL: J. Bacteriol. DATE: 2001 VOLUME: 183 NUMBER: 15 PAGES: 54-4667 CODEN: JOBAAY ISSN: 0021-9193 LANGUAGE: English PUBLISHER:
erican Society for Microbiology
             (Item 4 from file: 399)
6/3,AB/4
ALOG(R)File 399:CA SEARCH(R)
) 2004 American Chemical Society. All rts. reserv.
            CA: 135(3)31105y
                                 JOURNAL
135031105
The AIDA autotransporter system is associated with F18 and Stx2e in
cherichia coli isolates from pigs diagnosed with edema disease and
stweaning diarrhea
AUTHOR(S): Niewerth, Ulla; Frey, Andreas; Voss, Thomas; Le Bouguenec,
antal; Baljer, Georg; Franke, Sylvia; Schmidt, M. Alexander
LOCATION: Institut fur Infektiologie, Zentrum fur Molekularbiologie der
tzundung, Westfalische Wilhelms-Universitat, Munster, Germany, D-48149
JOURNAL: Clin. Diagn. Laboratory Immunol. DATE: 2001 VOLUME: 8 NUMBER: 1
PAGES: 143-149 CODEN: CDIMEN ISSN: 1071-412X LANGUAGE: English
PUBLISHER: American Society for Microbiology
             (Item 5 from file: 399)
6/3,AB/5
ALOG(R)File 399:CA SEARCH(R)
) 2004 American Chemical Society. All rts. reserv.
                                 JOURNAL
            CA: 131(8)98388d
131098388
Transcriptional organization of the czc heavy-metal homeostasis
terminant from Alcaligenes eutrophus
AUTHOR(S): Grosse, Cornelia; Grass, Gregor; Anton, Andreas; Franke,
lvia; Santos, Alexander Navarrete; Lawley, Blair; Brown, Nigel L.; Nies,
etrich H.
LOCATION: Institut fur Mikrobiologie der Martin-Luther-Universitat
lle-Wittenberg, Halle, Germany, D-06099
JOURNAL: J. Bacteriol. DATE: 1999 VOLUME: 181 NUMBER: 8 PAGES:
85-2393 CODEN: JOBAAY ISSN: 0021-9193 LANGUAGE: English PUBLISHER:
erican Society for Microbiology
             (Item 6 from file: 399)
6/3,AB/6
ALOG(R)File 399:CA SEARCH(R)
) 2004 American Chemical Society. All rts. reserv.
             CA: 124(19)252174v
                                   JOURNAL
124252174
Analysis of the enterohemorrhagic Escherichia coli 0157 DNA region
ntaining lambdoid phage gene p and Shiga-like toxin structural genes
AUTHOR(S): Datz, Martina; Janetzki-Mittmann, Claudia; Franke, Sylvia;
nzer, Florian; Schmidt, Herbert; Karch, Helge
LOCATION: Inst. Hygiene Mikrobiol., University Wuerzburg, Wuerzburg, Germany,
080
JOURNAL: Appl. Environ. Microbiol. DATE: 1996 VOLUME: 62 NUMBER: 3
PAGES: 791-7 CODEN: AEMIDF ISSN: 0099-2240 LANGUAGE: English
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(Item 7 from file: 399)

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6/3, AB/7

ALOG(R) File 399:CA SEARCH(R)

CA: 124(9)112090q JOURNAL 124112090 Clonal relatedness of shiga-like toxin-producing Escherichia coli O101 rains of human and porcine origin AUTHOR(S): Franke, Sylvia; Harmsen, Dag; Caprioli, Alfredo; Pierard, nis; Wieler, Lothar H.; Karch, Helge LOCATION: Institut fur Hygiene und Mikrobiologie, Universitat Wurzburg, erzburg, Germany, 97080 JOURNAL: J. Clin. Microbiol. DATE: 1995 VOLUME: 33 NUMBER: 12 PAGES: 74-8 CODEN: JCMIDW ISSN: 0095-1137 LANGUAGE: English (Item 8 from file: 399) 6/3,AB/8 ALOG(R)File 399:CA SEARCH(R) ) 2004 American Chemical Society. All rts. reserv. CA: 123(21)276954e JOURNAL 123276954 Development of PCR for screening of enteroaggregative Escherichia coli AUTHOR(S): Schmidt, Herbert; Knop, Christiane; Franke, Sylvia; Aleksic, ojanka; Heesemann, Juergen; Karch, Helge LOCATION: Institut fur Hygiene und Mikrobiologie, Universitat Wurzburg, erzburg, Germany, 97080 JOURNAL: J. Clin. Microbiol. DATE: 1995 VOLUME: 33 NUMBER: 3 PAGES: 1-5 CODEN: JCMIDW ISSN: 0095-1137 LANGUAGE: English 6/3,AB/9 (Item 9 from file: 399) ALOG(R)File 399:CA SEARCH(R) ) 2004 American Chemical Society. All rts. reserv. **JOURNAL** CA: 122(15)184960e 122184960 Construction of recombinant Shiga-like toxin-IIv (SLT-IIv) and its use in nitoring the SLT-IIv antibody status of pigs AUTHOR(S): Franke, Sylvia; Gunzer, Florian; Wieler, Lothar H.; Baljer, org; Karch, Helge LOCATION: Institut Hygiene und Mikrobiologie, Universitaet Wuerzburg, erzburg, Germany, 97080 JOURNAL: Vet. Microbiol. DATE: 1995 VOLUME: 43 NUMBER: 1 PAGES: 41-52 CODEN: VMICDQ ISSN: 0378-1135 LANGUAGE: English (Item 10 from file: 399) 6/3, AB/10ALOG(R) File 399:CA SEARCH(R) ) 2004 American Chemical Society. All rts. reserv. JOURNAL CA: 122(1)2737g 122002737 Differentiation in virulence patterns of Escherichia coli possessing eae AUTHOR(S): Schmidt, Herbert; Plaschke, Barbara; Franke, Sylvia; essmann, Holger; Schwarzkopf, Andreas; Heesemann, Juergen; Karch, Helge LOCATION: Inst. fur Hyg. und Mikrobiol., University Wurzburg, Wurzburg, rmany, D-97080 JOURNAL: Med. Microbiol. Immunol. DATE: 1994 VOLUME: 183 NUMBER: 1 PAGES: 23-31 CODEN: MMIYAO ISSN: 0300-8584 LANGUAGE: English (Item 11 from file: 399) 6/3, AB/11ALOG(R) File 399:CA SEARCH(R) ) 2004 American Chemical Society. All rts. reserv. 122002087 CA: 122(1)2087v JOURNAL Nucleotide sequence analysis of enteropathogenic Escherichia coli (EPEC) herence factor probe and development of PCR for rapid detection of EPEC rboring virulence plasmids AUTHOR(S): Franke, Juergen; Franke, Sylvia; Schmidt, Herbert; hwarzkopf, Andreas; Wieler, Lothar H.; Baljer, Georg; Beutin, Lothar;

LOCATION: Institut Hygiene und Mikrobiologie, Universitaet Wurzburg,

rch, Helge

erzburg, Germany, 97080

OURNAL: J. Clin. Microbiol. DATE: 1994 VOLUME: 32 NUMBER: 10 PAGES: 0-3 CODEN: JCMIDW ISSN: 0095-1137 LANGUAGE: English

/3,AB/12 (Item 1 from file: 98)
LOG(R)File 98:General Sci Abs/Full-Text
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29159 H.W. WILSON RECORD NUMBER: BGSA03229159
ecular Analysis of the Copper-Transporting Efflux System CusCFBA of
Scherichia coli.
anke, Sylvia%
ss, Gregor; Rensing, Christopher
Irnal of Bacteriology (J Bacteriol) v. 185 no13 (July 2003) p. 3804-12
CIAL FEATURES: bibl graph il tab ISSN: 0021-9193
NGUAGE: English
INTRY OF PUBLICATION: United States

STRACT: The cusCFBA operon of Escherichia coli was characterized. The SCFBA operon encodes proteins used for copper efflux. CusA and CusB were cessary for copper resistance, and CusC and CusF were essential for full sistance. Met-573, -623, and -672 in CusA were of functional importance. For a periplasmic protein, bound one copper per polypeptide. Methionine sidues of CusF were involved in copper binding, and the protein teracted with CusB and CusC polypeptides in a yeast 2-hybrid assay. Cus a tetrapartite resistance system involving the novel periplasmic oper-binding protein CusF. The findings support the hypothesis that Cu(I) directly transported from the periplasm across the outer membrane by the complex.

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             S1 AND STX2E
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             S3 AND STX2EB
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         3
             S1 AND STX2
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             S6 AND S3
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             S7 AND HIS
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